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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/351,723	07/12/1999	ROBERT C. WOHLSEN	1094	1138

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EXAMINER

AZAD, ABUL K

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 12/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/351,723

Applicant(s)

WOHLSEN ET AL.

Examiner

ABUL K. AZAD

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication filed on August 29, 2002.
2. Claims 23-43 are pending in this action. Claims 1-22 have been canceled. Claims 23-43 have been newly added.
3. The applicant's arguments with respect to claims 23-43 have been fully considered but they are not deemed to be persuasive. For examiner's response to the applicant's arguments or comments, see the detailed discussion in the Response to the Arguments section.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 25 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As per claims 25 and 32, the applicant claimed as "voice recognition technique comprises speaker independent voice recognition"; since voice recognition is recognition of particular characteristics of a person's utterances; but speaker independent speech recognition does not recognize particular characteristics of a person's utterances, so it is inappropriate use of "speaker independent". For examination purpose it is interpreted as "speaker dependent voice recognition".

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schier (US 6,246,988) further in view of well-known prior art (MPEP 2144.03).

As per claim 23, Schier teaches, "a method of obtaining a user's identity by voice, comprising:

"receiving a set of at least one known grammar and a set of at least one known voiceprint corresponding to a plurality of utterances from each of a first plurality of users" (col. 2, lines 39-56, the capacity to permit simultaneous access by multiple users);

"for each of the first plurality of users, associating the set of at least one known grammar and the set of at least one known voiceprint with an identifier of said user" (col. 3, lines 5-29, reads on "'security system comprises the caller's real time voice print of the authorization number to a previously recorded voice print of the caller speaking the authorization number");

"receiving at least one utterance from a subject user"(col. 3, lines 12-25, reads on "the caller speaks his or her authorization number into the telephone handset");

"performing a voice recognition . . . received from the subject user" (col. 4, lines 14-20, reads on "this can be accomplished using known voice recognition systems";

"for which the first voice recognition most closely matches at least one selected from the set of at least one grammar and the set of at least one voiceprint associated with the identifiers of the second plurality of users" (Fig. 3 a, element 221 and 222, here grammar is the verification number);

"from the second plurality of users, selecting the user for which a grammar of the first at least one of the at least one utterance received from the subject user most closely matches at least one of the set of at least one grammar associated with the identifiers of the second plurality of users" (Fig. 3 a, element 221 and 222, here grammar is the verification number);

"verifying a voiceprint of at least one of the at least one utterance has at least a similarity to the set of at least one voiceprint of the selected user; and responsive to the verifying step, providing the identifier of the selected user as the identifier of the subject user" (col. 4, lines 14-37).

Schier does not explicitly teach, "responsive to the voice recognition technique, selecting from the first plurality of users a second plurality of users, smaller than the first plurality of users by a factor of at least ten". Official Notice is taken on the well-known voice reorganization system, which reduces recognized persons from the initial persons at least by a factor of ten. Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention to use well-known teaching to reduce the persons to be recognized small size of persons because voice recognition has the ability to recognized persons unique characteristics of utterance.

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As per claim 24, Schier teaches, "wherein the voice recognition comprises extracting a grammar from a second at least one of the at least one utterance received from the subject user, the second at least one of the at least one utterance having at least one difference from the first at least one of the at least one utterance" (Fig. 3 a, element 211, user speaks password as second utterance).

As per claim 25, Schier teaches, " wherein the voice recognition technique comprises speaker dependent voice recognition" (col. 4, lines 14-25, voice recognition inherently a speaker dependent voice recognition).

As per claim 26, Schier teaches, "wherein the first at least one of the at least one utterance comprises a password" (Fig. 3a, element 211, user speaks password).

As per claim 27, Schier teaches, "wherein a number of the second plurality of users corresponds to a constant" (Fig. 3, element 222, inherently pass number is constant, because it is previously assigned number).

As per claim 28, Schier teaches, "wherein the second plurality of users corresponds to users for which the voice recognition technique yields a confidence level exceeding a threshold" (col. 3, lines 42-47, thresholds).

As per claim 29, Schier teaches, "wherein at least one of the at least one utterance may be other than a real word" (col. 4, lines 14-36, pass number is other than a real word).

As per claim 30, Schier teaches all the limitation stated above in claim 1, further Schier teaches,

"second input coupled to the storage output, and for providing at an output identifiers of the second plurality of users; a second recognizer having a first input for receiving the identifiers of the second plurality of users, and a second input for receiving at least one of the at least one utterance from the subject user, the second recognizer for extracting a grammar from the at least one of the at least one utterance received at the second voice recognizer input, and for selecting from the second plurality of users the user for which the grammar extracted most closely matches at least one of the set of at least one grammar associated with the identifiers of the second plurality of users received at a third input coupled to the storage output, and for providing an identifier of the selected user at an output" (Fig. 3a, element 211 as second input, element 213 as second recognizer and element 212 retrieves the stored password and user's voice print, output as element 215 as valid user);

"a verifier having a first input coupled to the second recognizer output, the verifier for obtaining a voiceprint of at least one of the at least one utterance received at a second input, and for verifying a voiceprint of at least one of the at least one utterance has at least a similarity to the set of at least one voiceprint of the selected user received at a third input coupled to the storage output; and responsive to said verification, providing at an output the identifier of the selected user as the identifier of the subject user" (col. 4, lines 38-58 and Fig. 3a, element 215).

As per claims 31-43, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 23-30.

***Response to Arguments***

8. The applicant argues: "Schier does not narrow a list of potential users down using voice recognition, and then perform grammar extraction to recognize the user. Schier performs a single voiceprint extraction to identify the user".

The examiner disagrees with applicant's assertions. Voice recognition by nature narrows a list of potential users, however the examiner rejected this limitation above in claims 1 and 30 and 37 using obvious reasoning. After narrowing down a list of potential users Schier teaches to perform grammar extraction to recognize the user see Figure 3a and 3b.

9. Applicant's arguments with respect to claims 23-43 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Marsha D. Banks-Harold**, can be reached at **(703) 305-4379**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**Washington, D.C. 20231**

Or faxed to:

**(703) 872-9314**

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's Customer Service Office whose telephone number is **(703) 306-0377**.

Abul K. Azad

November 27, 2002

*Marsha D. Banks-Harold*  
**MARSHA D. BANKS-HAROLD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**